

u.
09/701760

BEST AVAILABLE COPY
PATENT COOPERATION TREATY

PCT/US00/04733

PCT

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Commissioner
US Department of Commerce
United States Patent and Trademark
Office, PCT
2011 South Clark Place Room
CP2/5C24
Arlington, VA 22202
ETATS-UNIS D'AMERIQUE
in its capacity as elected Office

Date of mailing (day/month/year) 11 December 2000 (11.12.00)	
International application No. PCT/US00/04733	Applicant's or agent's file reference PC10433A
International filing date (day/month/year) 25 February 2000 (25.02.00)	Priority date (day/month/year) 26 February 1999 (26.02.99)
Applicant CONKLE, Harold, N. et al	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:
21 September 2000 (21.09.00)

☐ in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was
☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No.: (41-22) 740.14.35	Authorized officer C. Cupello Telephone No.: (41-22) 338.83.38
---	--

PATENT COOPERATION TREATY

PENNIE & EDMONDS
RECEIVED

OCT 2 2000

PCT

From the INTERNATIONAL SEARCHING AUTHORITY

To:
PENNIE & EDMONDS LLP
Attn. STERN, G.
1155 Avenue of the Americas
New York, NY 10036
UNITED STATES OF AMERICA

REFERRED TO-M

O.K. for

INVITATION TO PAY ADDITIONAL FEES

(PCT Article 17(3)(a) and Rule 40.1)

T-04T

Date of mailing
(day/month/year) 21/09/2000

PAYMENT DUE within 45 ~~xxxxx~~ days
from the above date of mailing

Applicant's or agent's file reference
1830-867-228

International application No.
PCT/US 00/04733

International filing date
(day/month/year) 25/02/2000

Applicant

PFIZER, INC. et al.

1. This International Searching Authority

- (i) considers that there are 3 (number of) inventions claimed in the international application covered by the claims indicated ~~XXXX~~ on the extra sheet:

and it considers that the international application does not comply with the requirements of unity of invention (Rules 13.1, 13.2 and 13.3) for the reasons indicated ~~XXXX~~ on the extra sheet:

- (ii) ☒ has carried out a partial international search (see Annex) ☐ will establish the international search report on those parts of the international application which relate to the invention first mentioned in claims Nos.:

2-6 and partially claims 1 and 18-20

- (iii) will establish the international search report on the other parts of the international application only if, and to the extent to which, additional fees are paid

2. The applicant is hereby invited, within the time limit indicated above, to pay the amount indicated below:

DEM 1 848.26 x 2 = DEM 3 696.52
Fee per additional invention number of additional inventions total amount of additional fees

Or, EUR 945. - x 2 = EUR 1 890. -

The applicant is informed that, according to Rule 40.2(c), the payment of any additional fee may be made under protest, i.e., a reasoned statement to the effect that the international application complies with the requirement of unity of invention or that the amount of the required additional fee is excessive.

3. ☒ Claim(s) Nos. See attached sheet (3rd page) have been found to be unsearchable under Article 17(2)(b) because of defects under Article 17(2)(a) and therefore have not been included with any invention.

Name and mailing address of the International Searching Authority
European Patent Office, P.O. 5318 Patentlaan 2
NL-2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 551 epo nl.
Fax: (+31-70) 340-3015

Authorized officer
Véronique Barilou

EINSCHREIBEN

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 2-6 and partially claims 1 and 18-20

Method for the purification and recovery of encysted protozoa by a salt flotation process.

2. Claims: 7-14 and partially claims 1, 18, 19, and 21-27

Method for the purification and recovery of encysted protozoa by a gas flotation process.

3. Claims: 15-17 and partially claims 18-27

Method for the sporulation of oocysts.

According to Art. 3(4)(iii) and Rule 13 PCT an application shall relate to one invention only or to a group of inventions so linked as to form a single general inventive concept, i.e., having at least one common technical feature defining a contribution over the prior art.

The original common concept which might have linked the above mentioned inventions is "a method concerning oocysts". This common concept is however not novel with regard to prior art:

US4544548, for instance, discloses a method for the purification and recovery of oocysts by a salt flotation process (see col. 7, l. 15-33).

Since no other technical feature can be distinguished which might link the subject-matter of said claims, each of the above mentioned groups of claims represents an independent invention.

N.B.: The use of the term "invention" here in no way implies recognition of an inventive step for the subject-matter of any group of claims.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 206

Continuation of Box 3.

Claims Nos.: 18-27 (all partially)

Claims 15-17 are directed to a method for the sporulation of oocysts. Claim 18 is referring to such a method. Consequently, claim 18 has been searched as if it were referring to claim 15 (method for the sporulation of oocysts) instead of claim 14 (method for the purification and recovery of encysted protozoa).

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

Annex to n PCT/ISA/206
COMMUNICATION RELATING TO THE RESULTS
OF THE PARTIAL INTERNATIONAL SEARCH

International Application No

PCT/US 00/04733

1. The present communication is an Annex to the invitation to pay additional fees (Form PCT/ISA/206). It shows the results of the international search established on the parts of the international application which relate to the invention first mentioned in claims Nos.:
2. see 'Invitation to pay additional fees'
This communication is not the international search report which will be established according to Article 18 and Rule 43.
3. If the applicant does not pay any additional search fees, the information appearing in this communication will be considered as the result of the international search and will be included as such in the international search report.
4. If the applicant pays additional fees, the international search report will contain both the information appearing in this communication and the results of the international search on other parts of the international application for which such fees will have been paid.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category * Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No.

X	US 4 544 548 A (DAVIS PAUL J ET AL) 1 October 1985 (1985-10-01) column 7, line 19	1
A	the whole document	2-6, 18-20
X	US 4 863 731 A (DAVIS PAUL J ET AL) 5 September 1989 (1989-09-05) column 7, line 26-45	1
A	the whole document	2-6, 18-20
A	RYLEY J F ET AL: "METHODS IN COCCIDIOSIS RESEARCH SEPARATION OF OOCYSTS FROM FECES" PARASITOLOGY, vol. 73, no. 3, 1976, pages 311-326, XP000909784 ISSN: 0031-1820 the whole document	1-6, 18-20
A	US 3 827 557 A (FISCHER E) 6 August 1974 (1974-08-06) claim 4	

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

& document member of the same patent family

Patent Family Annex

Information on patent family members

International Application No

PCT/US 00/04733

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4544548	A	01-10-1985	CA 1114292 A	15-12-1981
			DE 2849226 A	17-05-1979
			ES 475076 A	01-12-1979
			FR 2408351 A	08-06-1979
			GB 2008404 A,B	06-06-1979
			NL 7811230 A,B,	16-05-1979
			US 4863731 A	05-09-1989
			US 4552759 A	12-11-1985
			US 4752475 A	21-06-1988
US 4863731	A	05-09-1989	CA 1114292 A	15-12-1981
			DE 2849226 A	17-05-1979
			ES 475076 A	01-12-1979
			FR 2408351 A	08-06-1979
			GB 2008404 A,B	06-06-1979
			NL 7811230 A,B,	16-05-1979
			US 4544548 A	01-10-1985
			US 4552759 A	12-11-1985
			US 4752475 A	21-06-1988
US 3827557	A	06-08-1974	NONE	

09/701760

525 Rec'd PCT/PTO 30 NOV 2000

FORM PTO-1390 (REV. 10-95)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTORNEY'S DOCKET NUMBER PC10433A	
TRANSMITTAL LETTER TO THE UNITED STATES PATENT AND TRADEMARK OFFICE DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371					
INTERNATIONAL APPLICATION NO. PCT/US00/04733		INTERNATIONAL FILING DATE February 25, 2000		PRIORITY DATE CLAIMED February 26, 1999	
TITLE OF INVENTION METHOD FOR THE PURIFICATION, RECOVERY, AND SPORULATION OF CYSTS AND OOCYSTS					
APPLICANT(S) FOR DO/EO/US Harold N. CONKLE; Joseph E. SCHULTZ; Scott J. BLONIGEN; Fred H. WEBER; David R. KILANOWSKI; Bruce MONZYK; Timothy M. WERNER; Chad M. CUCKSEY; Hamish A.I. McARTHUR; and Ted L. TEWKSBURY					
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:					
1. <input checked="" type="checkbox"/> This is the FIRST submission of items concerning a filing under 35 U.S.C. 371. 2. <input type="checkbox"/> This is the SECOND or SUBSEQUENT submission of items concerning a filing under 35 U.S.C. 371. 3. <input checked="" type="checkbox"/> This express request to begin national examination procedures (35 U.S.C. 371(f)) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. 371(b) and PCT Articles 22 and 39(1). 4. <input checked="" type="checkbox"/> A proper Demand for International Preliminary Examination was made by the 19 th month from the earliest claimed priority date. 5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2)) a. <input checked="" type="checkbox"/> is transmitted herewith (required only if not transmitted by the International Bureau). b. <input type="checkbox"/> has been transmitted by the International Bureau. c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US). 6. <input type="checkbox"/> A translation of the International Application into English (35 U.S.C. 371(c)(2)). 7. <input checked="" type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) a. <input type="checkbox"/> are transmitted herewith (required only if not transmitted by the International Bureau). b. <input type="checkbox"/> have been transmitted by the International Bureau. c. <input checked="" type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired. d. <input type="checkbox"/> have not been made and will not be made. 8. <input type="checkbox"/> A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). 9. <input checked="" type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). In Unexecuted Form Only 10. <input type="checkbox"/> A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)). Items 11. To 16. Below concern other documents(s) or information included: 11. <input checked="" type="checkbox"/> An Information Disclosure Statement under 37 C.F.R. 1.97 and 1.98 with Form A820/1449; copies of 8 references. 12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 C.F.R. 3.28 and 3.31 is included. 13. <input checked="" type="checkbox"/> A FIRST preliminary amendment. <input type="checkbox"/> A SECOND or SUBSEQUENT preliminary amendment. 14. <input type="checkbox"/> A substitute specification. 15. <input type="checkbox"/> A change of power of attorney and/or address letter. 16. <input type="checkbox"/> Other items or information: Copy of International Search Report Copy of Invitation to Pay Additional Fees -- for Multiple Inventions Applicants "Response to Pay Additional Fees" for Multiple Inventions Certificate of Mailing via Express Mail EE 645346652 US Return Receipt Postcard					

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 1830-867-228	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/US 00/ 04733	International filing date (day/month/year) 25/02/2000	(Earliest) Priority Date (day/month/year) 26/02/1999
Applicant PFIZER, INC. et al.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 6 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ Certain claims were found unsearchable (See Box I).

3. ☒ Unity of invention is lacking (see Box II).

4. With regard to the title,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No. 1

☒ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

☐ None of the figures.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 00/04733

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☒ Claims Nos.: 18-27 (all partially)
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
see FURTHER INFORMATION sheet PCT/ISA/210

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.

2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 2-6 and partially claims 1 and 18-20

Method for the purification and recovery of encysted protozoa by a salt flotation process.

2. Claims: 7-14 and partially claims 1, 18, 19, and 21-27

Method for the purification and recovery of encysted protozoa by a gas flotation process.

3. Claims: 15-17 and partially claims 18-27

Method for the sporulation of oocysts.

FURTHER INFORMATION CONTINUED FROM PCT/SA/ 210

Continuation of Box I.2

Claims Nos.: 18-27 (all partially)

Claims 15-17 are directed to a method for the sporulation of oocysts. Claim 18 is referring to such a method. Consequently, claim 18 has been searched as if it were referring to claim 15 (method for the sporulation of oocysts) instead of claim 14 (method for the purification and recovery of encysted protozoa).

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 00/04733

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C12N1/10 C12N3/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, EPO-Internal, PAJ, BIOSIS, EMBASE, SCISEARCH, BIOTECHNOLOGY ABS, LIFESCIENCES, CHEM ABS Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 544 548 A (DAVIS PAUL J ET AL) 1 October 1985 (1985-10-01) column 7, line 19	1
A	column 7, line 33-35	2-6, 15-20
X	US 4 863 731 A (DAVIS PAUL J ET AL) 5 September 1989 (1989-09-05) column 7, line 26-45	1
A	column 7, line 45-47	2-6, 15-20
	--- -/--	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

G document member of the same patent family

Date of the actual completion of the international search

14 November 2000

Date of mailing of the international search report

28. 11. 00

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Herrmann, K

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 00/04733

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>RYLEY J F ET AL: "METHODS IN COCCIDIOSIS RESEARCH SEPARATION OF OOCYSTS FROM FECES" PARASITOLOGY, vol. 73, no. 3, 1976, pages 311-326, XP000909784 ISSN: 0031-1820 the whole document</p>	1-6, 15-20
A	<p>US 5 068 104 A (BHOGAL BALBIR S ET AL) 26 November 1991 (1991-11-26) column 7, line 55,56</p>	15-17
A	<p>US 3 617 529 A (THOMPSON WILLIAM H ET AL) 2 November 1971 (1971-11-02) column 2, line 21</p>	1,7-14, 21-27
A	<p>SMITH P H ET AL: "FROTH FLOTATION FOR HARVESTING CHLORELLA ALGAE" NORTHWEST SCIENCE,US,PULLMAN, WA, vol. 42, no. 4, 1968, pages 165-171, XP002064294 ISSN: 0029-344X the whole document</p>	1,7-14, 21-27

INTERNATIONAL SEARCH REPORT

International Application No

Information on patent family members

PCT/US 00/04733

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4544548	A	01-10-1985	CA 1114292 A DE 2849226 A ES 475076 A FR 2408351 A GB 2008404 A, B NL 7811230 A, B, US 4863731 A US 4552759 A US 4752475 A	15-12-1981 17-05-1979 01-12-1979 08-06-1979 06-06-1979 16-05-1979 05-09-1989 12-11-1985 21-06-1988
US 4863731	A	05-09-1989	CA 1114292 A DE 2849226 A ES 475076 A FR 2408351 A GB 2008404 A, B NL 7811230 A, B, US 4544548 A US 4552759 A US 4752475 A	15-12-1981 17-05-1979 01-12-1979 08-06-1979 06-06-1979 16-05-1979 01-10-1985 12-11-1985 21-06-1988
US 5068104	A	26-11-1991	NONE	
US 3617529	A	02-11-1971	NONE	